



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

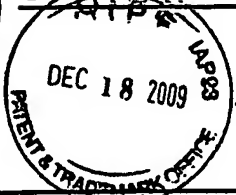
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,437	05/07/2007	Andrew Clayson	7050392001	6990
7590		01/13/2010		
Andrew Clayson				
92 Strathern Road				
Broughty Ferry				
Dundee, SCT DD5 A JS				
UNITED KINGDOM				
			EXAMINER	
			ANDERSON, DENISE R	
			ART UNIT	PAPER NUMBER
			1797	
			MAIL DATE	DELIVERY MODE
			01/13/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE



1KW
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/578,437

05/07/2007

Andrew Clayson

7050392001

6990

7590 12/10/2009
Seon P. O'Hanlon
Bingham McCutchen LLP
300 K Street, N.W., Suite 300
Washington, DC 20007

EXAMINER

ANDERSON, DENISE R

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

12/10/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,437	Applicant(s) CLAYSON, ANDREW	
	Examiner Denise R. Anderson	Art Unit 1797	

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2009.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4,7,8,10-14,18,19,21-35,37-43 and 48-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4,7,8,10-14,18,19,21-35,37-43 and 48-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 31, 2009 has been entered.

Claim Objections

3. Claims 6 and 46 were cancelled. The previous objections are withdrawn.
4. Applicant has rewritten claims 48-51 into independent apparatus claims that, verbatim, recite claim 4 upon which claims 48-51 previously depended. The only difference between the claims is the preamble, where the preamble recites a use for the claimed apparatus. As such, the previous objections are withdrawn from claims 48-51 for failing to further limit the previous claim.

Claim Rejections - 35 USC § 112

5. The rejections are withdrawn from claims 4, 6-8, 10-44, 46, and 48-53 that were rejected for indefiniteness under 35 U.S.C. 112, second paragraph. Applicant amended claim 4 to recite the following limitation where the underlined portion is what caused the previous rejection.

Claim 4 (currently amended) A cooking oil and/or fat filter apparatus, the apparatus comprising:

a filter means;

a cup for receiving matter from a liquid being filtered, in use, and wherein the filter means and the cup form a single cup and filter body, and said body comprises at least one annular cup means . . .

The examiner will interpret the limitation to recite that there is a cup (applicant's Fig. 3, cup 130) and a filter (applicant's Fig. 3, filter 100). When the filter is placed in the cup, the combination is a filter body (applicant's Fig. 3, filter body 135). The cup is an annular-shaped cup (applicant's Fig. 3, cup 130 that is annular-shaped).

6. Claims 7, 8, 17, 19, 21, 22, and 27-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 7 and 8 ultimately depend on cancelled claim 6. Claim 18 depends on cancelled claim 17. Claims 19 and 27-29 depend on cancelled claim 15. Claims 21 and 22 depend on cancelled claim 20. Since the five independent claims recite the same structural limitations, verbatim, the examiner will interpret claims 7, 8, 17, 19, 21, 22, and 27-29 to depend on first independent claim which is claim 4.

Claim Rejections - 35 USC § 103 – Summary

7. Claims 4, 7, 8, 10-12, 14, 18, 22-35, 37-43, and 48-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ookouchi (JP 10295565, Nov. 10, 1998 – The original

Art Unit: 1797

document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter.

8. Claims 4, 7, 8, 10-12, 14, 18, 21, 23-35, 37-43, and 48-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokose (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter.

9. Claims 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ookouchi (JP 10295565, Nov. 10, 1998 – The original document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter, in view of Yokose (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation) for the outlet below the filter.

10. Claims 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yokose (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter, in view of Ookouchi (JP 10295565, Nov. 10, 1998 – The original document with the figures, the Abstract in English, and a machine translation) for the outlet above the filter.

11. Claims 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ookouchi (JP 10295565, Nov. 10, 1998 – The original document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter, as applied to claim 4 above, -- and further in view of Kyle (US 4,604,203, Aug 5, 1986) for the polyester filter.

Art Unit: 1797

12. Claims 13 and 19 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Yokose (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter, as applied to claim 4 above, -- and further in view of Kyle (US 4,604,203, Aug 5, 1986) for the polyester filter.

Claim Rejections - 35 USC § 103

***Ookouchi, in view of Bitzer et al. – Independent Claims 4 and 48-51 and
Dependent Claims 7, 8, 10-12, 14, 18, 21-35, 37-43, 52, and 53***

13. Claims 4, 7, 8, 10-12, 14, 18, 22-35, 37-43, and 48-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ookouchi (JP 10295565, Nov. 10, 1998 – The original document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter.

14. Claims 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ookouchi (JP 10295565, Nov. 10, 1998 – The original document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter, in view of Yokose (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation) for the outlet below the filter.

15. The patentability analysis will begin with independent claims 4 and 48-51, which are verbatim copies of claim 4 except for preambles which impose no further structural limitations since all recite how the apparatus is used. As was stated above in the 112 section, claims 4 and 48-51 share the limitation "and wherein the filter means and the cup form a single cup and filter body, and said body comprises at least one annular cup means." This will be interpreted to

mean there is a cup (applicant's Fig. 3, cup 130) and a filter (applicant's Fig. 3, filter 100).

When the filter is placed in the cup, the combination is a filter body (applicant's Fig. 3, filter body 135). The cup is an annular-shaped cup (applicant's Fig. 3, cup 130 that is annular-shaped).

16. In the Abstract and Fig. 1, Ookouchi discloses a filter apparatus (oil filtering device 1) with a filter (filter 5) and a cup (filter holding part 3) where the filter is inserted in the cup to form a filter body. Applicant's filter is an inline filter.

17. Ookouchi discloses the claimed invention except that the inline filter is a cylindrical shape and not the recited annular shape. Bitzer et al. teaches that it is known in the inline filter art to make the inline filter annular shaped when Bitzer discloses inline filter forms in Figs. 6 and 8 and further teaches that inline filter forms can take the shape of "baskets with rims" and "jackets that could be either cylindrical or frustoconical" and that "several such baskets may be coaxially nested and centered on the conduit axis." Bitzer et al., col. 2, lines 49-62; Figs. 1-19 showing several embodiments. Bitzer further teaches that only the basket bottoms need be perforated, but if the sides (jackets) are also perforated, this "increases the effective sieve surface and reduces the flow resistance of the filter." Bitzer et al., col. 7, lines 63-67. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted the cylindrical inline filter in the Ookouchi filter apparatus for an annular shape as taught by Bitzer et al., since Bitzer et al. states at col. 7, lines 63-67 that such a modification would increase the effective filter surface and reduce the filter's flow resistance.

18. In Fig. 9, Ookouchi discloses an inlet (pouring oil M into filter 5) in to the filter apparatus and an outlet (oil pouring part 6) from the filter apparatus. In Fig. 1, Ookouchi further teaches that the cup (filter holding part 3) serves as a filter support that is rigid and closely fits the filter.

Art Unit: 1797

As was stated in the above paragraph, Ookouchi discloses the claimed invention except for the inline filter and the now recited support having at least one annular portion. Bitzer et al. teaches this. The patentability analysis is analogous.

19. In Fig. 6, Ookouchi discloses that the filter support (filter holding part 3) has an outlet in the form of apertures (breakthroughs 3e and 3d) and slots (breakthroughs 3f). As shown in Fig. 5, the filter (filter 5) forms a seal with the upper end of the filter support (filter holding part 3) above the slots (breakthroughs 3f), since oil is poured into the filter, which is then wetted and adheres to the smooth upper surface of the filter support, forming the seal, as required by the functional limitation. Below the seal is a transport means (bottom of filter holding part 3 with slot 3g) that guides the filtered fluid to the outlet (breakthroughs 3d-f).

20. Claims 48-51 recite the same structure as claim 4, verbatim, but recite different uses in the preamble. The filter apparatus can be used as a frying machine-type [claim 51] cooking apparatus [claim 48] on a food retail premises [claim 49] or on a commercial food preparation premises [claim 50]. These preambles recite no further structural limitations on the filter apparatus of claim 4. As such, the patentability analyses are analogous to that of claim 4.

21. In summary, Ookouchi, in view of Bitzer et al. for the inline filter, discloses or suggests all limitations recited in claims 4 and 48-51.

22. Ookouchi, in view of Bitzer et al. for the inline filter, discloses the claimed invention. Dependent claims 7, 8, 12, 22, 37-43, 52, and 53 recite further limitations on the filter apparatus that Ookouchi teaches. Claim 21 is addressed with claim 22 below.

23. Regarding claims 7, 8, and 12 – In Fig. 1, Ookouchi further discloses that the filter (filter 5) is a sheet [claim 7] of paper [claim 12] and it is inherent that a filter has filtering properties [claim 8]. Ookouchi, Translation of Detailed Description, ¶ 2, line 7-9.

24. Regarding claims 21 and 22 – In Fig. 9, Ookouchi, discloses an inlet (pouring oil M into filter 5) into the filter apparatus and an outlet (oil pouring part 6) from the filter apparatus where the inlet is above the filter as recited. Ookouchi further discloses the outlet above the filter [claim 22] but does not disclose the outlet below the filter [claim 21]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have located the Ookouchi outlet below the filter, instead of above, because this is simple substitution of one known element (outlet above the filter) for another (outlet below the filter) to obtain predictable results (there is an outlet from the filter apparatus). See, for example, Yokose's Fig. 1, where there is an inlet (above filter paper 7) into the filter apparatus and an outlet (Fig. 9, tap of oil-reservoir container 14) from the filter apparatus and, relative to the filter, the inlet and outlet are placed as recited in claim 21.

25. Regarding claims 37-41 – In Fig. 6, Ookouchi discloses that the filter support (filter holding part 3) has an outlet, in the form of a plurality of apertures (breakthroughs 3e and 3d) [claim 37], and that the filter support also has a plurality of channels (slot 3g and breakthroughs 3f) [claim 38]. In Fig. 1, Ookouchi discloses that the filter (filter 5) is removable [claim 39] and that the filter support (filter holding part 3) is removable [claim 40] via a quick release coupling [claim 41] in that the filter support is dropped into place and removed similarly.

26. Regarding claims 52, and 53 – In the Abstract and Fig. 1, Ookouchi discloses a filter apparatus (oil filtering device 1) with a filter (filter 5) and a filter support (filter holding part 3).

Art Unit: 1797

As discussed in the claim 4 patentability analysis and shown in Fig. 5, the Ookouchi filter (filter 5) forms a seal with the upper end of the filter support (filter holding part 3) above the slots (breakthroughs 3f). This is applicant's "seal through viscous tension" of the liquid being filtered [claim 52]. Also, the filter and the filter support are flared [claim 53].

27. In summary, Ookouchi, in view of Bitzer et al. for the inline filter, discloses or suggests all limitations recited in claims 7, 8, 12, 22, 37-41, 52, and 53. Ookouchi, in view of Bitzer et al. for the inline filter, in view of Yokose for the outlet below the filter, discloses or suggests all claim 21 limitations.

Claim Rejections - 35 USC § 103

***Yokose, in view of Bitzer et al. – Independent Claims 4 and 48-51 and
Dependent Claims 7, 8, 10-12, 14, 18, 21-35, 37-43, 52, and 53***

28. Claims 4, 7, 8, 10-12, 14, 18, 21, 23-35, 37-43, and 48-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokose (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter.

29. Claims 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yokose (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter, in view of Ookouchi (JP 10295565, Nov. 10, 1998 – The original document with the figures, the Abstract in English, and a machine translation) for the outlet above the filter.

30. The patentability analysis will begin with independent claims 4 and 48-51, which are verbatim copies of claim 4 except for preambles which impose no further structural limitations

Art Unit: 1797

since all recite how the apparatus is used. As was stated above in the 112 section, claims 4 and 48-51 share the limitation "and wherein the filter means and the cup form a single cup and filter body, and said body comprises at least one annular cup means." This will be interpreted to mean there is a cup (applicant's Fig. 3, cup 130) and a filter (applicant's Fig. 3, filter 100).

When the filter is placed in the cup, the combination is a filter body (applicant's Fig. 3, filter body 135). The cup is an annular-shaped cup (applicant's Fig. 3, cup 130 that is annular-shaped).

31. In the Abstract and Fig. 1, Yokose discloses a filter apparatus (oil strainer for cooking) with a filter (filter paper 7) and a cup (strainer 1 and frame 2) where the filter is inserted in the cup to form a filter body. Applicant's filter is an inline filter.

32. Yokose discloses the claimed invention except that the inline filter is a cylindrical shape and not the recited annular shape. Bitzer et al. teaches that it is known in the inline filter art to make the inline filter annular shaped when Bitzer discloses inline filter forms in Figs. 6 and 8 and further teaches that inline filter forms can take the shape of "baskets with rims" and "jackets that could be either cylindrical or frustoconical" and that "several such baskets may be coaxially nested and centered on the conduit axis." Bitzer et al., col. 2, lines 49-62; Figs. 1-19 showing several embodiments. Bitzer further teaches that only the basket bottoms need be perforated, but if the sides (jackets) are also perforated, this "increases the effective sieve surface and reduces the flow resistance of the filter." Bitzer et al., col. 7, lines 63-67. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted the cylindrical inline filter in the Yokose filter apparatus for an annular shape as taught by Bitzer et al., since Bitzer et al. states at col. 7, lines 63-67 that such a modification would increase the effective filter surface and reduce the filter's flow resistance.

Art Unit: 1797

33. Yokose discloses an inlet (Fig. 1, above filter paper 7) in to the filter apparatus and an outlet (tap of oil-reservoir container 14) from the filter apparatus. In Fig. 1, Yokose further teaches that the cup (strainer 1 and frame 2) serves as a filter support that is rigid and closely fits the filter. As was stated in the above paragraph, Yokose discloses the claimed invention except for the inline filter and the now recited support having at least one annular portion. Bitzer et al. teaches this. The patentability analysis is analogous.

34. In Figs. 1 and 2, Yokose discloses that the filter support (strainer 1 and frame 2) has an outlet in the form of a plurality of apertures (Fig. 2, strainer holes). As shown in Figs. 1 and 2, and disclosed in the Abstract, "[A] coffee filter paper 7 is put on a strainer 1, the strainer 1 is fitted in a frame 2 attached to the top plate of a stand 3, an oil receiving container 8 is placed just under the strainer 1 inside the legs 4 of stand 3, and oil is flowed in the coffee filter paper 7 to be received by the oil receiving container 8." In other words, the filter (filter paper 7) forms a seal with the upper end of the filter support (strainer 1 and frame 2) since oil is poured into the filter, which is then wetted and adheres to the smooth upper surface of the filter support, forming the seal, as required by the functional limitation. Below the seal is a transport means (sloped walls with channels) that guides the filtered fluid to the outlet that is in the form of a plurality of apertures (Fig. 2, strainer holes).

35. Claims 48-51 recite the same structure as claim 4, verbatim, but recite different uses in the preamble. The filter apparatus can be used as a frying machine-type [claim 51] cooking apparatus [claim 48] on a food retail premises [claim 49] or on a commercial food preparation premises [claim 50]. These preambles recite no further structural limitations on the filter apparatus of claim 4. As such, the patentability analyses are analogous to that of claim 4.

36. In summary, Yokose, in view of Bitzer et al. for the inline filter, discloses or suggests all limitations recited in claims 4 and 48-51.

37. Yokose, in view of Bitzer et al. for the inline filter, discloses the claimed invention. Dependent claims 7, 8, 12, 21, 37-41, 52, and 53 recite further limitations on the filter apparatus that Yokose discloses. Claim 22 will be addressed with claim 21.

38. Regarding claims 7, 8, and 12 – In Fig. 1, Yokose further discloses the filter (filter paper 7) is a sheet [claim 7] of paper [claim 12] and it is inherent that a filter has filtering properties [claim 8].

39. Regarding claims 21 and 22 – Yokose discloses an inlet (Fig. 1, above filter paper 7) into the filter apparatus and an outlet (tap of oil-reservoir container 14) from the filter apparatus where the inlet is above the filter as recited. Yokose further discloses the outlet below the filter [claim 21] but does not disclose the outlet above the filter [claim 22]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the Yokose outlet above the filter, instead of below, because this is simple substitution of one known element (outlet above the filter) for another (outlet below the filter) to obtain predictable results (there is an outlet from the filter apparatus). See, for example, Ookouchi's Fig. 9, where there is an inlet (pouring oil M into filter 5) into the filter apparatus and an outlet (oil pouring part 6) from the filter apparatus and, relative to the filter, the inlet and outlet are placed as recited in claim 22.

40. Regarding claim 37-41 – In Figs. 1 and 2, Yokose discloses, that the filter support (strainer 1 and frame 2) has an outlet in the form of a plurality of apertures (Fig. 2, strainer holes)

Art Unit: 1797

[claim 37], and that the filter support has a plurality of channels (Fig. 2, sloping channels between the strainer holes). In the Abstract and Fig. 1, Yokose discloses that the filter (filter paper 7) is removable [claim 39] and that the filter support (strainer 1 and cup 2) is removable [claim 40] via a quick release coupling [claim 41] in that the filter support slides in and out of place.

41. Regarding claims 52 and 53 – In the Abstract and Fig. 1, Yokose discloses a filter apparatus (oil strainer for cooking) with a filter (filter paper 7) and a filter support (strainer 1 and frame 2). As was discussed in the claim 4 patentability analysis and shown in Figs. 1 and 2, the Yokose filter (filter paper 7) forms a seal with the upper end of the filter support (strainer 1 and frame 2). This is applicant's "seal through viscous tension" of the liquid being filtered [claim 52]. Also, the filter and the filter support are flared [claim 53].

42. In summary, Yokose, in view of Bitzer et al. for the inline filter, discloses or suggests all limitations recited in claims 7, 8, 12, 21, 37-41, 52, and 53. Yokose, in view of Bitzer et al. for the inline filter, in view of Ookouchi for the outlet below the filter discloses or suggests all claim 22 limitations.

Claim Rejections - 35 USC § 103

Ookouchi (or Yokose), in view of Bitzer et al.

Dependent Claims 10, 11, 14, 18, 23-35, 42, and 43

43. Claims 10, 11, 14, 18, 23-35, 42, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ookouchi (JP 10295565, Nov. 10, 1998 – The original document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter.

Art Unit: 1797

44. Claims 10, 11, 14, 18, 23-35, 42, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokose (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter.

45. Ookouchi (or Yokose) discloses the claimed invention except for the inline filter and support being various shapes recited in claims 10, 11, 14, 18, and 23-34. These shapes are known in the inline filter art. Bitzer et al. discloses all the claimed inline filter forms in Figs. 1-19 in the shape of “baskets” with “jackets that could be either cylindrical or frustoconical” and that “several such baskets may be coaxially nested and centered on the conduit axis.” Bitzer et al., col. 2, lines 49-62. Bitzer further teaches that only the basket bottoms need be perforated, but if the sides (jackets) are also perforated, this “increases the effective sieve surface and reduces the flow resistance of the filter.” Bitzer et al., col. 7, lines 63-67. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the inline filter forms in the Ookouchi (or Yokose) filter apparatus as taught by Bitzer et al., since Bitzer et al. states at col. 7, lines 63-67 that such a modification would increase the effective filter surface and reduce the filter’s flow resistance.

46. Regarding claim 35, Ookouchi (or Yokose) discloses the claimed invention except for the inline filter and support being on its side rather than top to bottom as it is in the gravity-fed filter apparatus of Ookouchi (or Yokose). Bitzer et al. teaches that the inline filter and support can be on its side since the Bitzer et al. in line filters can be “for a conduit system” and, thus, can be pressure-fed, as opposed to gravity-fed. Bitzer et al., col. 1, lines 12-13. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have placed

Art Unit: 1797

the Ookouchi (or Yokose) filter on its side since it was known in the art that a filter can be on its side in a conduit system, as taught by Bitzer et al. at col. 1, lines 12-13.

47. Regarding claims 42 and 43, Ookouchi (or Yokose) discloses the claimed invention except for the inlet being a quick-release rotary coupling and the outlet being a quick-release rotary coupling. Bitzer et al. teaches inline filters "for a conduit system serving for the circulation of liquid" and further teaches valves and pipes to connect the filter apparatus into the conduit of the recirculation system. Bitzer et al., col. 1, lines 11-14; Figs. 1, 3, 6-8, and 12-19. It would have been obvious to one of ordinary skill in the art to have connected the Ookouchi (or Yokose) filter apparatus into a recirculation conduit, with pipes and valves, as taught by Bitzer et al., in order to filter the cooking oil before returning it to use with less exposure of personnel to hot oil.

48. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have, in the Ookouchi (or Yokose) filter apparatus in a recirculation conduit, to have substituted the valves, taught by Bitzer et al., with quick release rotary couplings at the inlet and outlet in order to quickly pull the filter apparatus out of service for maintenance or repair. To recap, Ookouchi (or Yokose), in view of Bitzer, discloses or suggests all limitations recited in claims 42 and 43.

49. In summary, Ookouchi (or Yokose), in view of Bitzer et al. for the inline filter, discloses or suggests all limitations recited in claims 10, 11, 14, 18, 23-35, 42, and 43.

Claim Rejections - 35 USC § 103
Ookouchi (or Yokose), in view of Bitzer et al., in view of Kyle
Dependent Claims 13 and 19

50. Claims 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ookouchi (JP 10295565, Nov. 10, 1998 – The original document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter, as applied to claim 4 above, – and further in view of Kyle (US 4,604,203, Aug 5, 1986) for the polyester filter.

51. Claims 13 and 19 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Yokose (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation), in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986) for the inline filter, as applied to claim 4 above, – and further in view of Kyle (US 4,604,203, Aug 5, 1986) for the polyester filter material.

52. Ookouchi (or Yokose) discloses the claimed invention except for the polyester filter. Kyle teaches that it is known to make “the support layer web and the filter layer web” of a “cooking oil filtering apparatus” from “polyethylene terephthalate” which is applicant’s recited polyester filter means in a filter apparatus. Kyle, col. 3, lines 25-33. In this same passage, Kyle further teaches that a polyester filter would be “unaffected by hot cooking oil” and would be FDA approved for direct contact with food. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the Ookouchi (or Yokose) filter apparatus with a polyester filtering means as taught by Kyle, since Kyle states at col. 3, lines 25-33, that such a modification would make the filter means “unaffected by hot cooking oil” and would be FDA approved for direct contact with food.

Art Unit: 1797

53. In summary, Ookouchi (or Yokose), in view of Bitzer et al. for the inline filter, in view of Kyle for the polyester filter material, discloses or suggests all limitations recited in claims 13 and 19.

Response to Arguments

54. Applicant's arguments filed July 31, 2009 have been fully considered but they are not persuasive.

55. Applicant's arguments are listed below, with the examiner's response after each argument.

- a. Regarding claim 4, since claim 4 replaces cancelled claim 1, applicant argues, "[N]one of the prior art, whether taken alone or in combination, teach, hint or suggests the novel and inventive combination of features recited in claim 1. There is no suggestion of any of the prior art of the combination of an annular cup and filter body and an annular support." Applicant's Remarks, p. 12, lines 27-30.

As in the above patentability analysis, the examiner responds that Ookouchi (or Yokose) discloses the claimed invention except that the inline filter is a cylindrical shape and not the recited annular shape. Bitzer et al. teaches that it is known in the inline filter art to make the inline filter annular shaped when Bitzer discloses inline filter forms in Figures 6 and 8 and further teaches that inline filter forms can take the shape of "baskets with rims" and "jackets that could be either cylindrical or frustoconical" and that "several such baskets may be coaxially nested and centered on the conduit axis." Bitzer et al., col. 2, lines 49-62; Figs. 1-19 showing several

embodiments. Bitzer further teaches that only the basket bottoms need be perforated, but if the sides (jackets) are also perforated, this "increases the effective sieve surface and reduces the flow resistance of the filter." Bitzer et al., col. 7, lines 63-67. As such, Bitzer et al. provides the motivation to combine when Bitzer et al. teaches that such a modification would increase the effective filter surface and reduce the filter's flow resistance.

- b. Regarding claim 4, applicant argues, "[N]either of the prior art documents, whether taken alone or in combination, teach, hint or suggest the novel and inventive combination of the features recited in fresh claim 4, and in particular, the combination of an annular cup and filter body, and an annular filter support therefore, wherein the self-seal is formed at an upper end therebetween, in use the self-seal being caused by the liquid being filtered." Applicant's Remarks, p. 13, lines 11-15.

The examiner responds that the combination of the annular cup, filter body, and filter support were addressed above in Point (a). With regards to the self seal, the functional limitation is shown below.

wherein, in use, at least one seal is formed between an upper end of the filter means and an upper end of the filter support means by cooking oil and/or cooking fat,

In both the Ookouchi and Yokose references, the oil is poured into the filter, which is then wetted and adheres to the smooth upper surface of the filter support, forming the seal, as required by the functional limitation.

- c. Regarding claim 4, applicant argues, "To suggest the combination of features of fresh claim 4 is taught by either of these documents, whether taken alone or in combination, would be for the Examiner to embark upon an unallowable hindsight analysis." Applicant's Remarks, p. 13, lines 16-18.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

56. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Denise R. Anderson whose telephone number is (571)270-3166. The examiner can normally be reached on Monday through Thursday, from 8:00 am to 6:00 pm.

57. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter D. Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

58. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 1797

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DRA/

/Walter D. Griffin/
Supervisory Patent Examiner, Art Unit 1797